



Evaluation of Turbidity Benchmark Data
2022 Construction General Permit
Stormwater Roundtable
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Overview

- Purpose
- Background
- Approach
- Results
- Discussion
- Questions



Purpose

- Evaluate turbidity data received from 2022 CGP operators subject to benchmark monitoring requirements for dewatering
- Sensitive waters (sediment impaired or high quality)
- Focus on:
 - Compliance with monitoring requirements
 - Whether data suggests the benchmark is achievable
 - Whether data suggests changes may be appropriate to improve compliance

Background

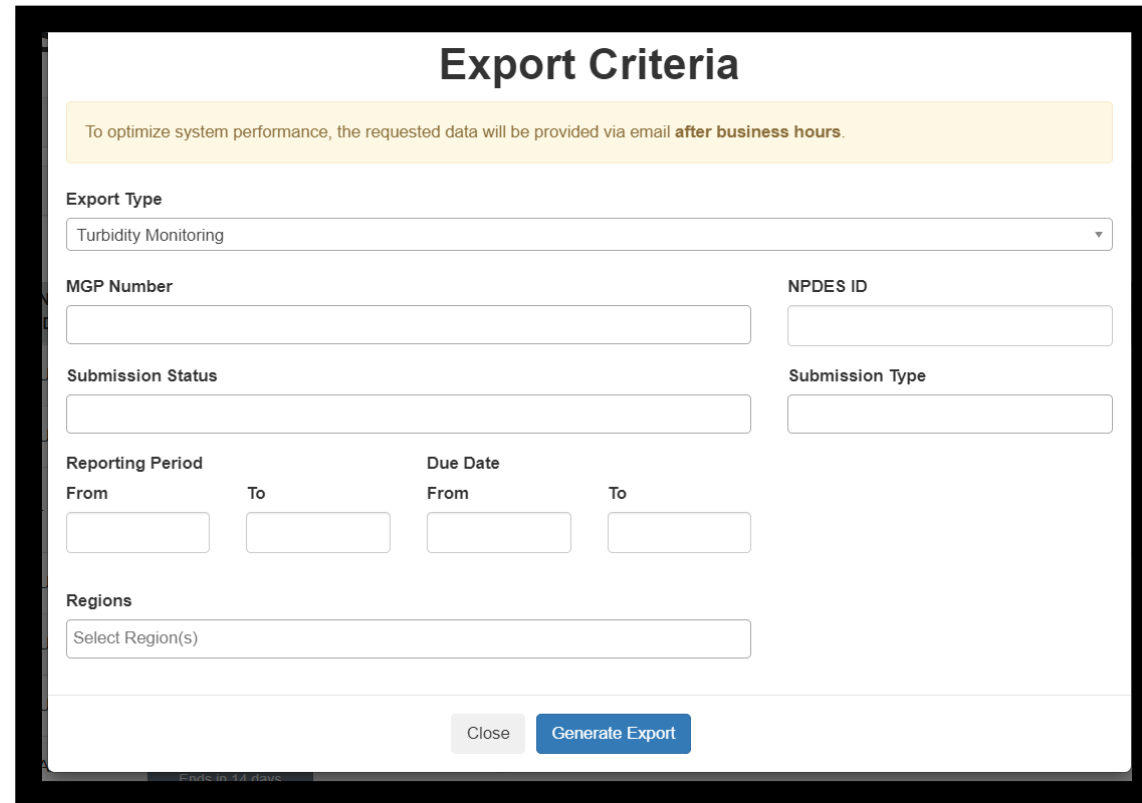
- Why were monitoring requirements added to 2022 permit?
 - Risk of significant sediment loadings that may result from controlled and untreated discharge.
 - Evidence of noncompliance at permitted sites. Create a baseline of data to inform future decisions.
 - Permit conditions for dewatering discharges by other permitting authorities.
 - Requirements provide a check on the permit's technology-based dewatering requirements, i.e., a level of assurance to address this reasonable potential for water quality standards exceedance.

Background (cont.)

- Sites identified with information from NOI.
- Sites collect at least one sample from dewatering each day of discharge.
- Benchmark is 50 NTUs (or approved alt. benchmark).
- Submit reports of weekly average data at end of each quarter.
 - Use EPA's electronic system (NeT) to submit data (unless a waiver for paper reports).
 - If no dewatering discharge during quarter -> reporting still required

Approach

- Developed two evaluation questions with associated metrics and methods.
- Queries in NeT to produce the data.



The screenshot shows a web form titled "Export Criteria". At the top, a yellow banner contains the text: "To optimize system performance, the requested data will be provided via email after business hours." Below this, the form includes several input fields and a dropdown menu:

- Export Type:** A dropdown menu with "Turbidity Monitoring" selected.
- MGP Number:** A text input field.
- NPDES ID:** A text input field.
- Submission Status:** A text input field.
- Submission Type:** A text input field.
- Reporting Period:** A section with four input fields labeled "From" and "To" under the heading "Reporting Period".
- Due Date:** A section with two input fields labeled "From" and "To" under the heading "Due Date".
- Regions:** A text input field with the placeholder text "Select Region(s)".

At the bottom of the form, there are two buttons: a grey "Close" button and a blue "Generate Export" button.

Results – Question 1

- **Percent of operators that submitted a monitoring report: 63-76%**
Trend over time could not be determined.

Metrics	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023
Number of operators required to submit monitoring reports	260	299	334	344	314	347
Number of operators that submitted a monitoring report	197	219	212	229	224	233
Number of operators that failed to submit a monitoring report	63	79	122	113	90	114
Percent of operators that submitted a monitoring report	76%	73%	63%	67%	71%	67%
Percent of operators that failed to submit a monitoring report	24%	26%	37%	33%	29%	33%

Results – Question 2

- **Percent of turbidity values that exceeded the benchmark: 4-9%**
Trend over time could not be determined.

Metrics	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023
Number of data points (i.e. weekly turbidity average is equal to or greater than zero) Total = 1,085	107	135	167	190	245	241
Number of benchmark exceedances reported Total = 69	7	10	15	15	9	13
Percent of benchmark exceedances reported Total = 6%	6.5%	7.4%	9.0%	7.9%	3.7%	5.4%

Discussion

- It's an initial snapshot from a limited data set.
- 24-37% = non-reporters
 - Operators may not have fully adjusted to the new requirement or were not aware of it.

But ... NeT system sent reminder emails to operators.
 - If no dewatering discharges in a quarter, operators may have had incorrect impression that reporting was not required.

But ... CGP states operators need to submit a report for every quarter site is active.
- Less than 10% = exceedances
 - Potentially suggests the benchmark threshold of 50 NTU was set at an achievable level.

Questions for the Audience

- Any improvements or recommendations for EPA to consider?
- Have other similar studies been completed? Are the results similar?